Question:

9. A sol was obtained by mixing of 0.1 M Barium Nitrate and 0.1 M Potassium Chromate solutions. The micelles drift to anode in the electric field. What is the charge sign of the micelle? Write the reaction equation and micelle structure. The volume of which reagent was higher?

Solution:

 $Ba(NO_3)_2+K_2CrO_4 = BaCrO_4 + 2KNO_3;$

Barium chromium (BaCrO₄) is a bright yellow crystalline substance poorly soluble in water.

The charge sign of the micelle is negative (-);

[(BaCrO₄)m, 2nCrO₄²⁻], 2(n – x)K⁺]⁻ 2x K⁺;

Answer: -